COMPONENTS:

- (1) Acetamide, N-[4-[[(iminomethyl)amino] sulfony1]pheny1]-; C₉H₁₂N₄O₃S;[19077-97-5]
- (2) Water; H₂O [7732-18-5]

ORIGINAL MEASUREMENTS:

Sapozhnikova, N. V.; Postovskii, I. Ya. Zh. Prikl. Khim. 1944, 17, 427-34.

VARIABLES:

Temperature

PREPARED BY:

R. Piekos

EXPERIMENTAL VALUES:

t/°c -	Solubility	
L/ C -	Weight % 10 ³	mol kg ⁻¹ water ^a
20	0.0154	0.601
37	0.039	1.52
50	0.100	3.91
75	0.320	12.5
99	0.868 ^b	34.2

a Calculated by compiler.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The sulfonamide was dissolved in water to form a satd soln which was occasionally agitated in a glass vessel immersed in a thermostat. The equilibrium was usually attained after 1 h. Five- to 100-cm³ samples of the satd soln were placed in Pt crucibles or dishes and evapd to dryness at temps lower than 110-115°C. The residue was dried to const wt of 105-110°C and weighed.

SOURCE AND PURITY OF MATERIALS:

Pure, recrystd sulfonamide was used. Its mp conformed to that reported in the literature.

Purity of the water was not specified.

ESTIMATED ERROR:

Soly: quite reliable results were obtained over the temp range 20-75°C. At higher temps the accuracy was poor due to evapn of water during sampling (authors).
Temp: ±0.05°C (authors).

REFERENCES:

b Calculated from the heat of dissolution $(10,667 \text{ cal mol}^{-1})$

COMPONENTS:

- (1) Acetamide, N-[4-[[(aminoiminomethy1) amino]sulfony1]pheny1]-; C₉H₁₂N₄O₃S; [19077-97-5]
- (2) Ethanol; C₂H₆O; [64-17-5]
- (3) Water; H₂O; [7732-18-5]

ORIGINAL MEASUREMENTS:

Sapozhnikova, N. V.; Postovskii, I. Ya. Zh. Prikl. Khim. 1944, 17, 427-34.

VARIABLES:

Concentration of ethanol

PREPARED BY:

R. Piekos

EXPERIMENTAL VALUES:

Concentration of ethanol	Solubility at 75°C	
Weight%	Weight%	mol kg ⁻¹ solvent ^a
0	0.32	0.012
19.2	0.77	0.030
38.3	1.31	0.052
57.6	3.24	0.131
76.4	3.78	0.153
96	2.50	0,100

a Calculated by compiler.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The sulfonamide was dissolved in EtOH-water mixts to form satd solns which were occasionally agitated in glass vessels immersed in a thermostat. The equilibrium was usually attained after 1 h. Five- to 100-cm³ samples of the satd soln were placed in Pt crucibles or dishes and evapd to dryness at temps lower than 110-115°C. The residue was dried to const wt at 105-110°C and weighed.

SOURCE AND PURITY OF MATERIALS:

Pure, recrystd sulfonamide was used. Its mp conformed to that reported in the literature.

The purity of ethanol and water was not specified.

ESTIMATED ERROR:

Soly: quite reliable results were obtained (authors).

Temp: $\pm 0.05^{\circ}$ C (authors).

REFERENCES: